

absorbing alloy in an acid solution, and a third step of heat-treating by sintering the particles of the hydrogen absorbing alloy treated in the acid solution at a temperature of not more than the melting point of the particles of the hydrogen absorbing alloy in a hydrogen atmosphere are carried out, to produce the hydrogen absorbing alloy, the hydrogen absorbing alloy having a sintered surface region and a bulk region covered with the surface region and satisfying the condition of $a/b \geq 1.21$, wherein a is the sum of respective abundance ratios of atoms Ni, Co, and Mn in the surface region and wherein b is the sum of respective abundance ratios of atoms Ni, Co, and Mn and the surface region having an atom manganese.

